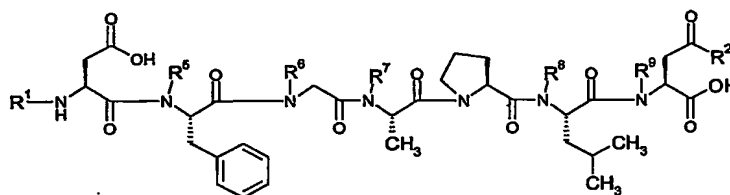21

Claims

1. A peptide having an amino acid sequence of Formula I (SEQ ID NO: 1):

    $X_1FGAPX_2 X_3$ in which

    X_1, is selected from Aspartic acid and a derivative thereof selected from acylated and alkylated Aspartic acid;

    X_2 is Leucine or when X_3 is absent, X_2 is selected from Leucine and amidated Leucine;

    X_3 is absent or selected from Aspartic acid and amidated Aspartic acid;

    as well as salt and any derivative or analogue thereof.

2. A peptide according to claim1 wherein X_1 and X_3 are Aspartic acid.

3. A peptide according to claims 1 or 2 wherein X_3 is absent.

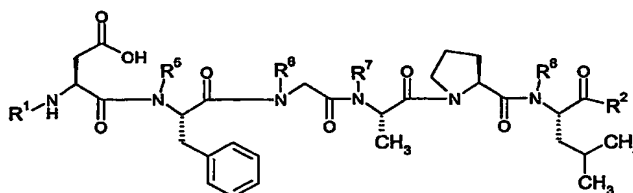4. A peptide according to any of the preceding claims of the Formula II below:

Formula II

wherein R^1 is selected from H, C_2-C_6 acyl and C_1-C_6 alkyl; R^2 is selected from OH and NR^3R^4, wherein R^3 and R^4 are independently selected from H and C_1-C_6 alkyl and R^5, R^6, R^7, R^8 and R^9 are independently selected from H and C_1-C_6 alkyl.

5. A peptide according to claim 4 wherein R^1 is selected from H and C_2-C_6 acyl and R^2 is selected from OH and NH_2.

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6. A peptide according to claim 4 wherein R^1 is H and R^2 is OH.

7. A peptide according to claim 1 of the Formula III below:

Formula III

wherein R^1 is selected from H, C_2-C_6 acyl and C_1-C_6 alkyl; R^2 is selected from OH and NR^3R^4, wherein R^3 and R^4 are independently selected from H and C_1-C_6 alkyl and R^5, R^6, R^7 and R^8 are independently selected from H and C_1-C_6 alkyl.

8. A peptide according to claim 7 wherein R^1 is selected from H and C_2-C_6 acyl and R^2 is selected from OH and NH_2.

9. A peptide according to claims 7 or 8 wherein R^1 is acetyl and R^2 is NH_2.

10. A peptide according to any of the preceding claims wherein R^5, R^6, R^7 and R^8 are H.

11. A peptide according to any preceding claims selected from the following group: SEQ ID NO. 2, SEQ ID NO. 3 and SEQ ID NO. 4.

12. A compound according to any of the preceding claims for use as a medicament.

13. Use of a peptide according to claims 1 to 11 for the preparation of a medicament for the treatment or prevention of an amyloidosis disorder related to IAPP.

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14. Use according to claim 13 wherein the amyloidosis disorder is a diabetic disorder.

15. Use according to claim 14 wherein the diabetic condition is Type II diabetes.

16. Use according to claim 14 wherein the diabetic condition is post-transplantation Type I diabetes.

17. A pharmaceutical composition comprising a compound according to claims 1 to 11 as active ingredient and a pharmaceutically acceptable excipient or carrier.

18. A method of treating or preventing diabetic disorders by administering an effective amount of any of the peptides or compounds of claims 1 to 11 to a subject in the need thereof.

19. A method according to claim 18, in which the subject is human.